

Table 12.1
Cancer of the Larynx (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2008</u>														
All Races	1975-88	0.1	1988-08	-2.5*									-2.5*	-2.5*
White	1975-88	0.0	1988-08	-2.5*									-2.5*	-2.5*
Black	1975-90	1.1*	1990-08	-2.7*									-2.7*	-2.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2008</u>														
All Races	1992-08	-2.8*											-2.8*	-2.8*
White	1992-08	-2.6*											-2.6*	-2.6*
Black	1992-08	-3.3*											-3.3*	-3.3*
<u>SEER 9 Observed Incidence^a, 1975-2008</u>														
All Races	1975-88	0.1	1988-08	-2.6*									-2.6*	-2.6*
White	1975-88	0.0	1988-08	-2.5*									-2.5*	-2.5*
Black	1975-90	1.2*	1990-08	-2.8*									-2.8*	-2.8*
<u>SEER 13 Observed Incidence^b, 1992-2008</u>														
All Races	1992-08	-2.9*											-2.9*	-2.9*
White	1992-08	-2.7*											-2.7*	-2.7*
White NH ^{ef}	1992-08	-2.5*											-2.5*	-2.5*
Black	1992-08	-3.4*											-3.4*	-3.4*
Black NH ^{ef}	1992-08	-3.4*											-3.4*	-3.4*
API ^e	1992-08	-3.7*											-3.7*	-3.7*
AI/AN ^{eg}	1992-08	-1.4											-1.4	-1.4
Hispanic ^f	1992-08	-2.4*											-2.4*	-2.4*
<u>U.S. Cancer Mortality^c, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2008</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

a
b
c
d
e
f
g
*
-

Table 12.2
Cancer of the Larynx (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2008</u>														
All Races	1975-88	-0.3	1988-08	-2.7*									-2.7*	-2.7*
White	1975-85	0.3	1985-08	-2.6*									-2.6*	-2.6*
Black	1975-90	0.9	1990-08	-2.6*									-2.6*	-2.6*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2008</u>														
All Races	1992-08	-2.9*											-2.9*	-2.9*
White	1992-08	-2.7*											-2.7*	-2.7*
Black	1992-08	-3.3*											-3.3*	-3.3*
<u>SEER 9 Observed Incidence^a, 1975-2008</u>														
All Races	1975-88	-0.3	1988-08	-2.7*									-2.7*	-2.7*
White	1975-87	-0.2	1987-08	-2.7*									-2.7*	-2.7*
Black	1975-90	0.9	1990-08	-2.7*									-2.7*	-2.7*
<u>SEER 13 Observed Incidence^b, 1992-2008</u>														
All Races	1992-08	-3.0*											-3.0*	-3.0*
White	1992-08	-2.8*											-2.8*	-2.8*
White NH ^{ef}	1992-08	-2.7*											-2.7*	-2.7*
Black	1992-08	-3.4*											-3.4*	-3.4*
Black NH ^{ef}	1992-08	-3.4*											-3.4*	-3.4*
API ^e	1992-08	-3.4*											-3.4*	-3.4*
AI/AN ^{eg}	1992-08	-1.7											-1.7	-1.7
Hispanic ^f	1992-08	-2.6*											-2.6*	-2.6*
<u>U.S. Cancer Mortality^c, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2008</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

a
b
c
d
e
f
g
*
-

Table 12.3
Cancer of the Larynx (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2008</u>														
All Races	1975-89	1.8*	1989-08	-2.5*									-2.5*	-2.5*
White	1975-89	1.7*	1989-08	-2.3*									-2.3*	-2.3*
Black	1975-89	3.8*	1989-08	-2.7*									-2.7*	-2.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2008</u>														
All Races	1992-08	-2.9*											-2.9*	-2.9*
White	1992-08	-2.7*											-2.7*	-2.7*
Black	1992-08	-3.1*											-3.1*	-3.1*
<u>SEER 9 Observed Incidence^a, 1975-2008</u>														
All Races	1975-89	1.8*	1989-08	-2.6*									-2.6*	-2.6*
White	1975-89	1.7*	1989-08	-2.4*									-2.4*	-2.4*
Black	1975-89	3.8*	1989-08	-2.8*									-2.8*	-2.8*
<u>SEER 13 Observed Incidence^b, 1992-2008</u>														
All Races	1992-08	-3.0*											-3.0*	-3.0*
White	1992-08	-2.8*											-2.8*	-2.8*
White NH ^{ef}	1992-08	-2.6*											-2.6*	-2.6*
Black	1992-08	-3.2*											-3.2*	-3.2*
Black NH ^{ef}	1992-08	-3.3*											-3.3*	-3.3*
API ^e	1992-08	-4.2*											-4.2*	-4.2*
AI/AN ^{eg}	-	-											-	-
Hispanic ^f	1992-08	-2.2											-2.2	-2.2
<u>U.S. Cancer Mortality^c, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2008</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

a
b
c
d
e
f
g
*
-

Table 12.4
Cancer of the Larynx (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	5.02	9.47	1.48	4.96	9.43	1.46	7.08	13.36	-
1976	5.22	10.00	1.39	5.19	9.95	1.44	7.31	14.61	-
1977	5.03	9.72	1.35	4.96	9.68	1.31	7.46	13.89	2.45
1978	5.32	9.80	1.84	5.32	9.80	1.85	6.95	13.20	2.22
1979	5.39	10.09	1.68	5.40	10.21	1.64	7.50	13.22	3.07
1980	5.25	10.01	1.54	5.16	9.88	1.52	7.34	14.47	-
1981	5.39	9.82	1.92	5.31	9.56	2.03	8.09	16.33	-
1982	5.30	9.76	1.80	5.27	9.75	1.79	7.91	14.49	2.88
1983	5.34	9.93	1.73	5.43	10.18	1.69	6.83	12.20	2.63
1984	5.10	9.62	1.58	4.99	9.58	1.46	8.47	14.86	3.44
1985	5.42	9.93	1.93	5.41	10.01	1.88	8.47	15.40	3.37
1986	5.00	9.39	1.61	4.93	9.19	1.67	7.74	15.37	2.08
1987	5.20	9.42	1.92	5.14	9.35	1.89	8.21	15.09	3.12
1988	5.20	9.58	1.87	5.19	9.58	1.86	8.18	14.94	3.21
1989	5.02	8.90	2.00	4.98	8.88	1.93	7.90	14.26	3.29
1990	5.10	9.17	1.92	4.99	8.97	1.87	9.47	17.74	3.59
1991	4.73	8.47	1.80	4.79	8.53	1.86	6.60	12.29	2.28
1992	4.97	9.06	1.77	4.87	8.88	1.73	8.69	15.77	3.41
1993	4.38	8.14	1.48	4.38	8.05	1.55	6.95	14.12	1.72
1994	4.66	8.34	1.76	4.54	8.15	1.68	8.93	16.00	3.72
1995	4.42	7.89	1.62	4.43	7.87	1.64	6.84	13.18	2.26
1996	4.27	7.58	1.64	4.28	7.59	1.62	6.46	11.45	2.79
1997	4.23	7.56	1.61	4.16	7.36	1.62	7.23	13.50	2.76
1998	3.86	6.78	1.59	3.73	6.53	1.56	6.69	12.07	2.84
1999	4.20	7.08	1.85	4.17	7.02	1.79	7.13	12.22	3.57
2000	4.05	7.27	1.45	4.07	7.22	1.49	6.08	11.46	2.20
2001	3.67	6.59	1.27	3.61	6.37	1.30	6.32	12.32	1.93
2002	3.58	6.36	1.33	3.49	6.18	1.30	6.35	11.33	2.69
2003	3.36	5.99	1.23	3.36	5.90	1.28	5.09	9.68	1.84
2004	3.48	6.12	1.38	3.46	6.02	1.38	5.85	10.97	2.40
2005	3.50	6.23	1.31	3.51	6.18	1.36	5.78	10.78	2.06
2006	3.35	5.90	1.26	3.39	5.83	1.37	5.44	10.74	1.62
2007	3.23	5.64	1.24	3.22	5.58	1.24	5.70	10.35	2.37
2008	3.11	5.50	1.14	3.16	5.57	1.12	4.63	8.50	1.95

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(http://surveillance.cancer.gov/delay/\)](http://surveillance.cancer.gov/delay/).

- ^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 - Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 12.5
Cancer of the Larynx (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	5.02	9.47	1.48	4.96	9.43	1.46	7.08	13.36	-
1976	5.22	10.00	1.39	5.19	9.95	1.44	7.31	14.61	-
1977	5.03	9.72	1.35	4.96	9.68	1.31	7.46	13.89	2.45
1978	5.32	9.80	1.84	5.32	9.80	1.85	6.95	13.20	2.22
1979	5.39	10.09	1.68	5.40	10.21	1.64	7.50	13.22	3.07
1980	5.25	10.01	1.54	5.16	9.88	1.52	7.34	14.47	-
1981	5.39	9.82	1.92	5.31	9.56	2.03	8.09	16.33	-
1982	5.30	9.76	1.80	5.27	9.75	1.79	7.91	14.49	2.88
1983	5.34	9.93	1.73	5.43	10.18	1.69	6.82	12.20	2.63
1984	5.10	9.62	1.58	4.99	9.58	1.46	8.46	14.85	3.44
1985	5.42	9.93	1.93	5.41	10.01	1.88	8.46	15.40	3.37
1986	5.00	9.39	1.61	4.93	9.19	1.67	7.74	15.36	2.08
1987	5.19	9.42	1.92	5.14	9.35	1.89	8.20	15.08	3.12
1988	5.20	9.58	1.87	5.19	9.57	1.86	8.17	14.93	3.21
1989	5.02	8.90	2.00	4.98	8.88	1.92	7.89	14.25	3.28
1990	5.10	9.17	1.92	4.99	8.96	1.87	9.46	17.72	3.59
1991	4.73	8.46	1.80	4.79	8.53	1.85	6.59	12.27	2.28
1992	4.97	9.06	1.77	4.86	8.87	1.72	8.68	15.75	3.40
1993	4.38	8.13	1.48	4.38	8.04	1.55	6.94	14.10	1.71
1994	4.66	8.34	1.76	4.53	8.14	1.67	8.91	15.96	3.71
1995	4.41	7.89	1.62	4.42	7.86	1.63	6.82	13.15	2.25
1996	4.27	7.57	1.64	4.27	7.57	1.62	6.44	11.42	2.78
1997	4.22	7.55	1.61	4.15	7.34	1.62	7.21	13.46	2.74
1998	3.86	6.78	1.59	3.72	6.51	1.55	6.67	12.03	2.83
1999	4.19	7.07	1.85	4.15	7.00	1.78	7.10	12.17	3.55
2000	4.04	7.26	1.44	4.05	7.20	1.48	6.05	11.41	2.19
2001	3.66	6.58	1.27	3.60	6.35	1.30	6.28	12.26	1.92
2002	3.57	6.34	1.32	3.48	6.15	1.29	6.31	11.26	2.67
2003	3.35	5.98	1.22	3.34	5.87	1.28	5.05	9.61	1.82
2004	3.47	6.10	1.37	3.44	5.98	1.37	5.80	10.88	2.37
2005	3.48	6.20	1.30	3.49	6.14	1.35	5.72	10.68	2.03
2006	3.34	5.87	1.26	3.36	5.79	1.36	5.37	10.62	1.59
2007	3.21	5.62	1.23	3.19	5.53	1.23	5.62	10.21	2.33
2008	3.07	5.44	1.12	3.11	5.47	1.10	4.52	8.30	1.89
1975-2008	4.42	8.02	1.57	4.42	7.98	1.57	6.84	12.77	2.48

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 12.7
Cancer of the Larynx (Invasive)

SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2004-2008									
All ages	3.4	6.0	1.3	3.4	6.0	1.3	5.2	9.8	1.9
Under 65	1.7	2.7	0.7	1.7	2.7	0.7	2.9	5.0	1.1
65 and over	15.2	28.9	5.3	15.6	29.3	5.5	21.3	43.5	7.0
All ages (IARC world std) ^c	2.4	4.1	0.9	2.4	4.1	0.9	3.8	7.0	1.4
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	-	0.1	0.1	-	0.2	-	-	-
35-39	0.3	0.4	0.2	0.3	0.4	0.2	-	-	-
40-44	1.0	1.3	0.6	1.0	1.3	0.6	1.4	2.0	0.9
45-49	2.5	3.9	1.2	2.5	3.8	1.2	4.1	6.6	2.0
50-54	5.0	7.9	2.1	5.0	7.9	2.0	8.7	13.4	4.6
55-59	8.1	13.6	2.9	7.9	13.1	2.9	15.1	27.4	4.9
60-64	11.9	20.2	4.3	11.8	19.8	4.4	20.4	38.4	6.1
65-69	15.6	26.8	5.9	15.8	26.7	6.0	26.5	47.8	10.4
70-74	17.4	31.1	6.3	17.9	31.3	6.9	24.2	49.2	6.4
75-79	15.6	30.0	5.1	16.2	30.8	5.3	20.8	41.7	7.6
80-84	14.1	29.3	4.5	14.6	30.2	4.7	15.6	34.6	-
85+	10.5	26.8	3.0	10.8	27.7	3.1	11.2	35.3	-
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2004-2008									
All ages									
Under 65									
65 and over									
All ages (IARC world std) ^c									
Age-Specific Rates, 2004-2008									
<1									
1-4									
5-9									
10-14									
15-19									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									
55-59									
60-64									
65-69									
70-74									
75-79									
80-84									
85+									

^a SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

- Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 12.8
Cancer of the Larynx (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	53	54	46	-	-	-
1970-1973 ^a	-	-	-	62	63	56	-	-	-
1975-1977 ^b	66.3	67.0	62.5	67.0	67.8	62.2	58.5	57.5	63.4 ^f
1978-1980 ^b	65.4	65.6	64.1	66.3	66.5	64.8	56.9	57.2	55.8 ^f
1981-1983 ^b	68.2	68.4	67.1	69.6	69.8	68.5	56.5	57.3	52.8 ^f
1984-1986 ^b	65.4	66.0	62.2	67.3	67.9	63.9	52.7	52.9	51.1 ^f
1987-1989 ^b	65.8	66.9	61.5	67.2	68.8	61.1	56.1	54.3	61.4 ^f
1990-1992 ^b	66.0	66.9	62.6	67.9	68.6	64.7	53.5	54.1	51.3 ^f
1993-1995 ^b	63.7	65.4	56.5	65.3	67.2	57.4	53.0	54.3	47.4 ^f
1996-2000 ^b	64.6	66.2	58.9	66.8	68.3	61.1	51.0	52.6	46.5
2001-2007 ^b	62.7 ^e	62.8 ^e	62.1	64.9	65.0 ^e	64.7	51.9	52.8	48.3
5-Year Period Survival (Percent) ^{cd}									
2007	60.6	61.5	57.0	61.8	62.7	58.2	52.3	53.2	48.1
Stage Distribution (%) 2001-2007 ^c									
All Stages									
Number of cases	14,813	11,908	2,905	12,032	9,638	2,394	2,148	1,724	424
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	57	59	51	59	61	52	46	47	42
Regional	20	18	27	20	18	27	24	23	31
Distant	17	17	16	15	16	15	25	25	21
Unstaged	5	5	6	6	5	6	5	5	6
5-Year Relative Survival (Percent), 2001-2007 ^c									
Age at Diagnosis:									
Ages <45	71.5	70.8	72.8	74.2	73.9	74.7	56.2 ^f	53.7 ^f	62.1 ^f
Ages 45-54	61.7	62.1	59.9	65.2	65.4	64.1	49.3	50.6	44.0 ^f
Ages 55-64	62.7	63.5	59.3	63.8	64.5	60.3	55.3	56.3	49.0 ^f
Ages 65-74	59.3	60.8	53.1	58.9	60.1	54.0	57.3	60.2	43.9 ^f
Ages 75+	55.9	57.5	49.4	57.2	58.9	50.3	42.7 ^f	42.0 ^f	44.9 ^g
Ages <65	63.2	63.6	61.4	65.2	65.6	63.5	53.0	54.0	48.8
Ages 65+	58.0	59.6	51.7	58.1	59.6	52.6	53.8	56.0	43.9 ^f
Stage:									
All Stages	60.8	61.8	56.7	61.8	62.8	58.0	53.2	54.7	47.1
Localized	76.7	77.5	72.6	76.8	77.7	73.0	72.8	74.2	66.2
Regional	41.6	41.6	41.6	41.5	40.9	43.0	41.6	44.2	33.3 ^f
Distant	32.8	32.2	35.5	33.9	33.2	37.1	29.5	29.5	29.4 ^f
Unstaged	50.4	51.8	45.1	49.3	50.8	42.9 ^f	47.0 ^f	46.1 ^f	-

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2008.

^c SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

Based on follow-up of patients into 2008.

^d Period survival provides a 2007 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2005-2007: 0-1 year survival), (2004-2006: 1-2 year survival), (2003-2005: 2-3 year survival), (2002-2004: 3-4 year survival), (2001-2003: 4-5 years survival).

^e The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^f The standard error is between 5 and 10 percentage points.

^g The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 12.9
Cancer of the Larynx (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

	Year of Diagnosis																				
	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	88.6	89.0	88.9	87.7	90.6	88.3	87.6	87.2	89.4	88.7	86.4	86.8	86.0	85.9	85.7	84.8	84.7	87.1	87.1	87.0	88.8
2-year	79.2	80.0	79.3	77.7	80.7	78.1	79.0	77.1	80.1	79.7	78.1	76.3	75.1	77.1	75.6	75.0	74.8	75.8	78.3	74.6	
3-year	73.3	74.4	73.7	71.1	74.0	73.5	72.2	69.6	75.1	74.5	72.3	70.8	71.0	71.3	70.6	70.1	67.2	68.9	72.7		
4-year	68.9	70.2	69.0	66.5	69.9	69.3	66.3	65.4	69.5	69.9	68.8	67.6	68.8	67.0	66.7	67.6	62.7	64.5			
5-year	65.7	66.8	66.1	64.8	67.4	65.9	62.4	62.6	66.1	66.2	65.5	63.3	64.3	63.7	63.2	62.9	60.3				
6-year	63.3	64.0	62.8	60.5	63.5	62.6	60.1	58.3	63.4	64.1	62.4	59.2	60.8	60.7	60.7	60.1					
7-year	60.9	61.4	60.2	58.7	62.4	59.9	57.9	56.2	60.2	61.7	60.1	55.4	57.5	56.7	57.3						
8-year	58.9	59.7	57.3	56.6	58.7	57.2	55.8	54.7	57.6	58.5	57.2	52.5	54.6	53.6							
9-year	56.5	57.5	54.6	54.3	56.2	55.1	52.8	51.0	54.8	54.7	55.8	50.2	52.4								
10-year	54.2	55.5	52.4	51.7	54.0	51.9	50.1	49.5	51.5	52.3	53.8	48.2									
11-year	52.7	53.1	50.2	49.8	52.3	49.2	47.7	47.9	48.0	49.7	51.1										
12-year	51.0	50.4	48.2	47.4	51.1	46.6	45.8	47.1	46.1	47.5											
13-year	49.7	48.1	47.0	44.0	49.5	43.0	44.0	45.0	44.3												
14-year	48.2	46.6	44.4	42.3	47.5	40.8	42.2	43.4													
15-year	45.9	44.8	41.9	40.7	46.3	38.9	40.6														
16-year	43.8	42.3	40.4	38.3	44.7	36.6															
17-year	41.5	40.6	38.8	36.3	42.0																
18-year	40.3	38.8	37.4	32.8																	
19-year	38.6	37.3	34.7																		
20-year	36.6	35.6																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 12.10
Cancer of the Larynx (Invasive)
SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	88.9	89.1	89.2	88.2	90.8	88.6	88.0	89.4	91.2	88.4	89.0	87.9	87.4	86.1	86.2	85.3	84.5	87.7	87.0	87.5	89.5
2-year	79.3	80.2	79.7	78.4	81.4	79.0	79.7	79.0	81.9	79.7	80.9	77.1	76.4	77.7	75.8	75.3	75.5	76.0	77.3	75.8	
3-year	73.7	74.8	74.3	71.4	74.4	73.7	73.9	71.5	76.7	74.6	75.1	71.6	72.0	72.0	71.3	71.1	68.6	69.0	73.0		
4-year	69.2	70.7	69.7	67.3	70.4	69.8	68.1	66.7	71.7	69.9	71.4	69.1	70.1	67.7	66.9	69.0	63.4	64.0			
5-year	66.1	67.4	66.9	65.4	68.4	66.5	64.3	63.9	68.1	66.6	68.2	65.4	66.0	64.6	63.4	63.7	60.5				
6-year	63.7	64.5	63.5	61.3	64.5	63.2	62.1	59.9	65.7	64.3	65.3	62.2	62.4	61.8	61.0	61.2					
7-year	61.4	61.9	61.1	59.7	63.4	60.3	60.1	57.9	62.4	62.0	63.0	58.7	58.9	58.7	58.9						
8-year	59.3	60.4	58.4	57.6	59.9	58.2	57.8	56.8	59.5	58.6	60.1	55.3	56.2	56.6							
9-year	56.9	58.1	56.3	55.7	57.4	56.0	54.3	53.0	57.0	54.4	58.3	52.8	53.8								
10-year	54.8	56.4	54.1	53.2	54.8	52.7	51.6	51.1	53.9	52.0	56.5	50.8									
11-year	53.6	53.9	52.2	51.1	53.5	50.3	49.2	49.6	50.3	49.4	54.4										
12-year	52.1	51.1	50.4	49.0	52.2	47.5	47.2	48.5	49.2	46.9											
13-year	50.9	48.8	49.4	45.6	51.3	44.4	45.3	46.6	47.4												
14-year	49.3	47.2	47.1	44.3	48.7	42.0	43.8	44.7													
15-year	47.2	45.2	44.4	42.6	47.2	40.3	41.7														
16-year	44.9	43.0	42.9	40.2	46.2	38.2															
17-year	42.6	41.8	41.3	37.9	43.9																
18-year	41.4	39.7	39.6	34.8																	
19-year	39.5	38.1	36.6																		
20-year	37.7	36.4																			

^a

Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 12.11
Cancer of the Larynx (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	87.1	88.4	87.5	85.9	89.5	87.2	85.8	78.5	81.5	90.0	76.7	83.5	81.1	85.4	83.3	82.4	85.4	84.8	87.6	85.0	85.5
2-year	78.5	78.9	77.7	74.6	78.1	74.0	75.9	69.0	72.9	79.2	67.7	73.8	70.7	74.5	75.0	73.7	71.7	74.9	82.1	69.4	
3-year	71.5	72.4	71.4	69.9	72.5	72.6	65.0	62.2	68.4	74.2	62.0	68.1	67.6	68.2	67.4	66.2	61.3	68.7	71.5		
4-year	66.9	67.6	65.7	63.4	67.8	66.9	58.4	59.9	60.5	69.6	59.2	62.8	64.5	64.1	65.3	61.9	59.6	66.1			
5-year	63.4	64.4	62.9	61.9	62.9	63.2	53.9	57.5	57.8	63.9	55.4	56.7	58.4	60.3	62.3	59.5	58.3				
6-year	61.1	61.6	59.7	57.7	59.7	60.0	51.5	51.6	54.0	63.1	51.8	49.7	55.1	55.9	59.0	55.7					
7-year	58.1	59.0	56.2	54.9	57.6	58.3	48.6	49.7	51.2	60.3	49.0	45.5	52.4	48.3	49.6						
8-year	56.8	56.6	52.7	52.5	54.1	52.9	47.0	46.2	49.4	58.3	46.4	44.0	49.1	41.7							
9-year	54.2	54.4	48.3	48.9	51.6	50.6	46.0	43.2	45.6	55.6	46.4	42.1	47.5								
10-year	50.9	51.8	45.6	45.9	50.9	48.6	43.5	42.8	41.4	53.4	44.1	40.3									
11-year	48.4	49.3	42.5	44.8	48.0	44.7	41.3	41.1	38.7	50.4	39.2										
12-year	45.5	46.9	40.0	41.3	45.6	42.6	39.5	40.9	34.1	48.9											
13-year	43.9	44.5	38.0	37.9	42.9	37.3	38.3	38.2	32.4												
14-year	42.5	43.5	34.5	34.4	42.5	35.5	35.4	37.8													
15-year	40.1	42.7	32.7	33.5	42.1	33.3	34.7														
16-year	38.3	39.2	30.9	31.2	39.3	29.9															
17-year	35.7	35.8	29.5	30.1	35.4																
18-year	35.0	34.9	29.0	25.8																	
19-year	33.8	33.4	27.4																		
20-year	31.3	32.3																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 12.15
Cancer of the Larynx (Invasive)

SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 17 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2004-2008			Trend 1999-2008 ^c			Trend 1999-2008 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	3.4	6.0	1.3	-2.9*	-3.0*	-3.0*	-2.6*	-2.7*	-2.6*
White	3.4	6.0	1.3	-2.7*	-2.8*	-2.8*	-2.5*	-2.7*	-2.4*
White Hispanic ^e	2.2	4.3	0.6	-2.5*	-2.7*	-	-	-	-
White Non-Hispanic ^e	3.6	6.3	1.4	-2.5*	-2.7*	-2.6*	-	-	-
Black	5.2	9.8	1.9	-3.4*	-3.4*	-3.2*	-2.8*	-2.7*	-2.8*
Asian/Pacific Islander	1.1	2.2	0.3	-3.7*	-3.4*	-	-	-	-
Amer Ind/Alaska Nat ^f	1.7	2.8	-	-	-	-	-	-	-
Hispanic ^e	2.2	4.2	0.6	-2.4*	-2.6*	-	-	-	-

U.S. Mortality ^g	Rate 2004-2008			Trend 1999-2008 ^h		
	Rate per 100,000 persons			AAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY						
All Races						
White						
White Hispanic ^e						
White Non-Hispanic ^e						
Black						
Asian/Pacific Islander						
Amer Ind/Alaska Nat						
Total U.S.						
CHSDA Counties						
Non-CHSDA Counties						
Hispanic ^e						

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

^c The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

^d The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2008.

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^f Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^g US Mortality Files, National Center for Health Statistics, CDC.

^h The 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

* The APC is significantly different from zero (p<.05).

Table 12.16
Cancer of the Larynx (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2004-2008</u>									
Atlanta & Rural Georgia	3.64	6.89	1.17	3.44	6.19	1.27	4.36	9.35	1.08
Atlanta	3.51	6.58	1.18	3.30	5.88	1.28	4.25	9.12	1.07
Rural Georgia	6.24	12.79	-	5.94	11.99	-	6.71	14.46	-
California	2.65	4.79	0.94	2.81	5.05	1.00	3.93	7.02	1.67
Greater Bay Area	2.27	4.02	0.88	2.45	4.26	0.99	4.51	7.27	2.41
San Francisco-Oakland	2.37	4.15	0.95	2.49	4.32	1.00	4.91	8.01	2.63
San Jose-Monterey	2.09	3.76	0.75	2.39	4.17	0.97	-	-	-
Los Angeles	2.64	5.03	0.79	2.82	5.36	0.82	3.78	7.31	1.42
Greater California	2.79	4.96	1.02	2.92	5.16	1.07	3.83	6.53	1.61
Connecticut	3.65	6.50	1.41	3.51	6.23	1.36	5.87	11.63	1.99
Detroit	4.71	8.27	1.89	4.20	7.34	1.61	6.91	12.65	2.95
Hawaii	2.50	4.71	0.57	3.88	6.61	-	-	-	-
Iowa	4.15	7.30	1.54	4.14	7.29	1.53	6.84	-	-
Kentucky	5.71	9.61	2.55	5.69	9.58	2.51	6.40	11.31	2.91
Louisiana	5.59	10.01	2.06	5.15	8.93	2.05	7.03	13.81	2.14
New Jersey	3.73	6.72	1.42	3.67	6.53	1.43	5.04	9.88	1.73
New Mexico	2.61	4.68	0.85	2.78	4.94	0.92	-	-	-
Seattle-Puget Sound	3.20	5.48	1.32	3.35	5.64	1.42	3.93	7.56	-
Utah	1.76	3.03	0.67	1.79	3.07	0.68	-	-	-
9 SEER Areas ^b	3.31	5.84	1.25	3.31	5.78	1.28	5.39	10.09	2.04
11 SEER Areas ^b	3.09	5.54	1.12	3.16	5.60	1.16	4.92	9.27	1.86
13 SEER Areas ^b	3.10	5.56	1.12	3.17	5.62	1.16	4.95	9.33	1.85
17 SEER Areas ^b	3.39	6.03	1.27	3.44	6.04	1.31	5.21	9.84	1.88

^a

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

^b

The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

-

Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 12.21
Cancer of the Larynx (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2008
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <18 ^e	0 to <33 ^e	>=33 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	30,315	21,190	14,645	10,283	6,490	3,956	71,378	86,346	2,595	88,941
	Males	24,076	17,064	11,688	8,151	5,238	3,194	57,017	69,149	2,124	71,273
	Females	6,239	4,126	2,957	2,132	1,252	762	14,361	17,197	471	17,668
White ^b	Both Sexes	25,306	18,174	12,638	8,793	5,790	3,567	60,604	73,726	2,067	75,793
	Males	20,046	14,681	10,147	7,050	4,744	2,879	48,511	59,298	1,687	60,985
	Females	5,260	3,493	2,491	1,743	1,046	688	12,093	14,428	380	14,808
Black ^b	Both Sexes	4,229	2,449	1,679	1,234	598	280	8,965	10,470	180	10,650
	Males	3,351	1,885	1,292	928	419	223	6,975	8,093	152	8,245
	Females	878	564	387	306	179	57	1,990	2,377	28	2,405
Asian/ Pacific Islander ^c	Both Sexes	468	328	217	+	+	+	1,113	+	+	+
	Males	412	280	188	+	+	+	969	+	+	+
	Females	56	48	29	+	+	+	144	+	+	+
Hispanic ^d	Both Sexes	1,423	922	807	+	+	+	3,152	+	+	+
	Males	1,215	759	680	+	+	+	2,654	+	+	+
	Females	208	163	127	+	+	+	498	+	+	+

Estimated prevalence percent^a on January 1, 2008, of the SEER 11 population diagnosed in the previous 18 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)										Age-Adjusted ^f
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0185%	-	-	0.0002%	0.0007%	0.0060%	0.0273%	0.0741%	0.1124%	0.0829%	0.0190%
	Males	0.0303%	-	-	0.0002%	0.0008%	0.0086%	0.0442%	0.1301%	0.2060%	0.1941%	0.0346%
	Females	0.0070%	-	-	0.0002%	0.0006%	0.0034%	0.0112%	0.0234%	0.0385%	0.0213%	0.0066%
White ^c	Both Sexes	0.0200%	-	-	0.0003%	0.0009%	0.0065%	0.0282%	0.0761%	0.1163%	0.0849%	0.0196%
	Males	0.0324%	-	-	0.0002%	0.0009%	0.0091%	0.0456%	0.1311%	0.2104%	0.1978%	0.0353%
	Females	0.0076%	-	-	0.0003%	0.0009%	0.0037%	0.0111%	0.0250%	0.0404%	0.0227%	0.0070%
Black ^c	Both Sexes	0.0201%	-	-	-	0.0008%	0.0069%	0.0436%	0.1163%	0.1486%	0.0948%	0.0266%
	Males	0.0332%	-	-	-	-	0.0095%	0.0697%	0.2228%	0.2868%	0.2490%	0.0512%
	Females	0.0083%	-	-	-	-	0.0047%	0.0220%	0.0343%	0.0539%	0.0230%	0.0097%
Asian/ Pacific Islander ^c	Both Sexes	0.0081%	-	-	-	-	0.0025%	0.0080%	0.0277%	0.0593%	0.0596%	0.0088%
	Males	0.0146%	-	-	-	-	0.0047%	0.0134%	0.0545%	0.1187%	0.1374%	0.0178%
	Females	0.0021%	-	-	-	-	-	0.0033%	0.0049%	0.0148%	0.0108%	0.0020%
Hispanic ^d	Both Sexes	0.0068%	-	-	-	0.0007%	0.0036%	0.0140%	0.0488%	0.0840%	0.0714%	0.0133%
	Males	0.0111%	-	-	-	0.0008%	0.0044%	0.0229%	0.0954%	0.1664%	0.1684%	0.0261%
	Females	0.0023%	-	-	-	-	0.0028%	0.0053%	0.0087%	0.0227%	0.0149%	0.0036%

^a US 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person. Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^f Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

^{g h i} (g) Cases diagnosed more than 33 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <33 and >=33. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.

+ Not available.

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Larynx, by Race and Sex

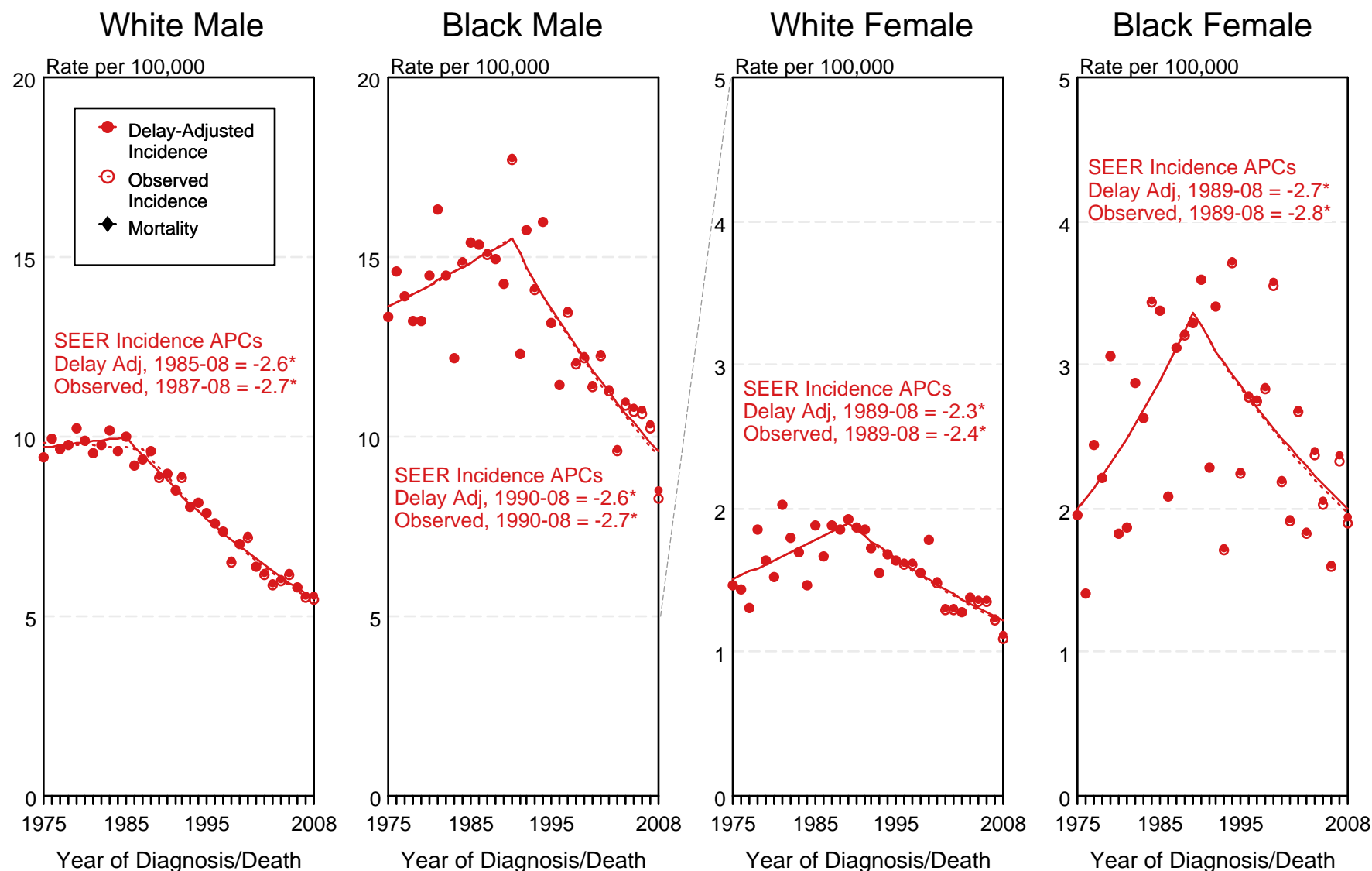


Figure 12.1

^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

SEER Incidence and US Death Rates^a

Cancer of the Larynx, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2008

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2008

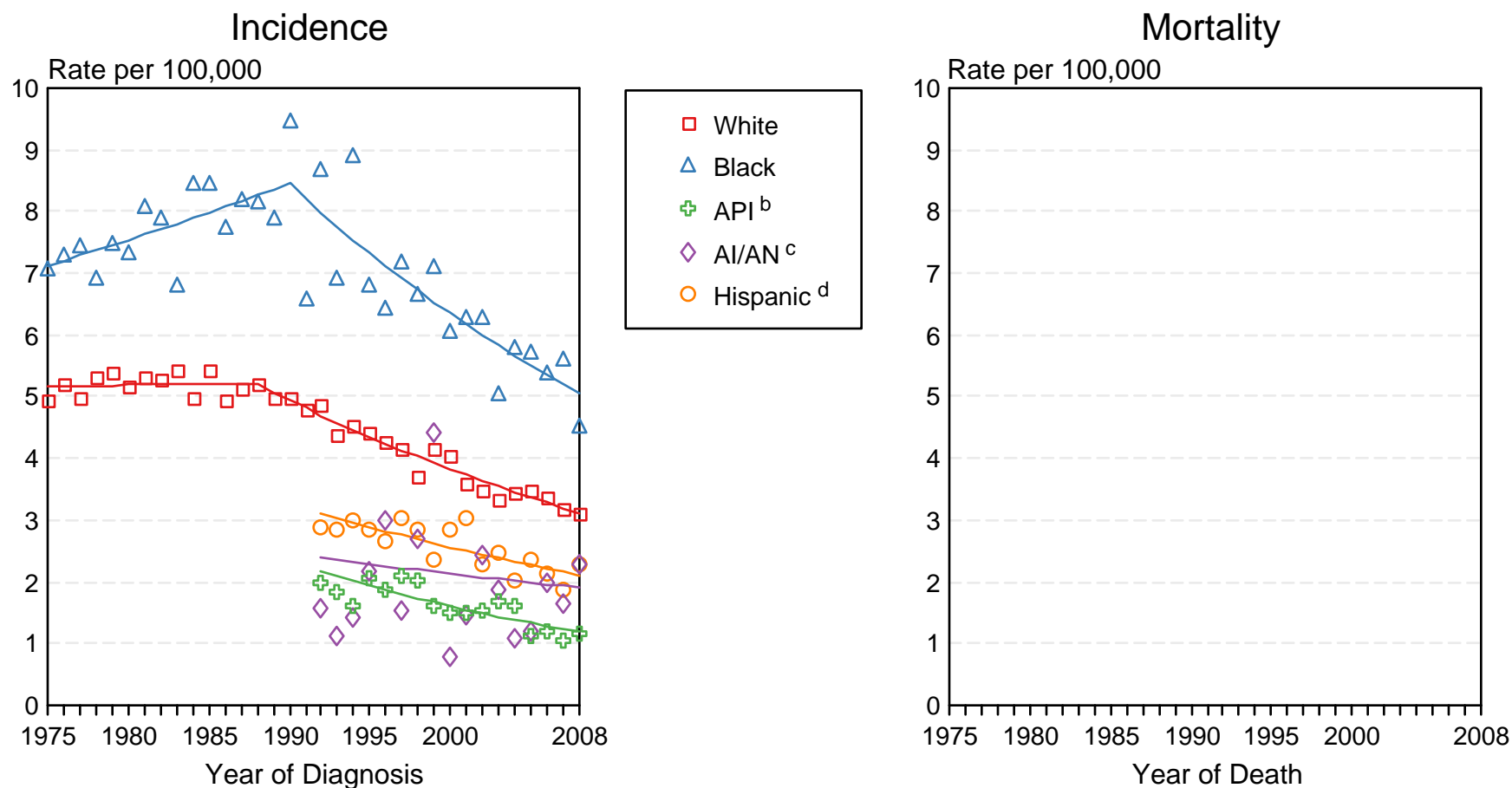


Figure 12.2

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2008 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2008 allow a maximum of 3 joinpoints.

^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Larynx, Male, by Race

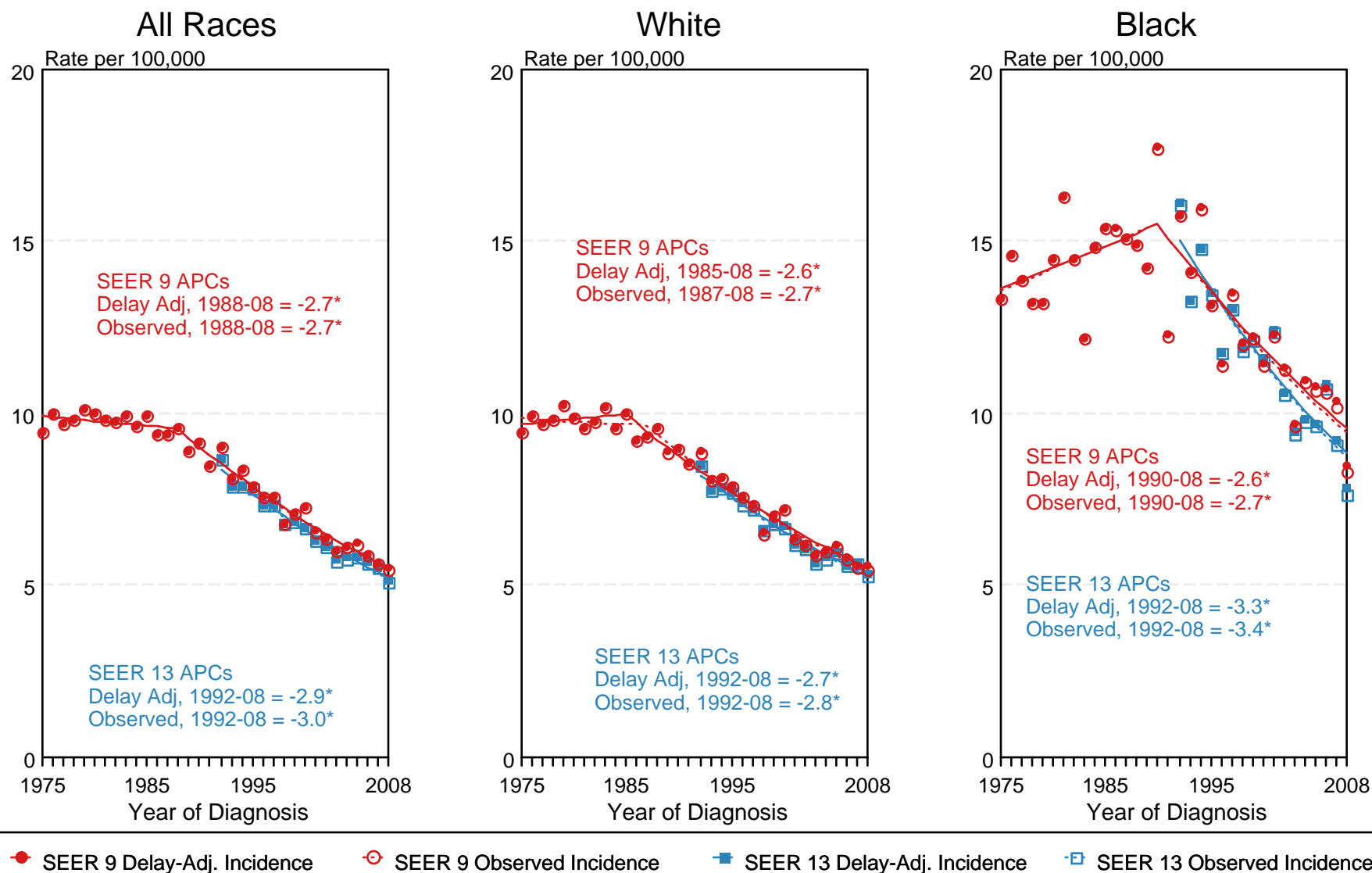


Figure 12.3

^a Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Larynx, Female, by Race

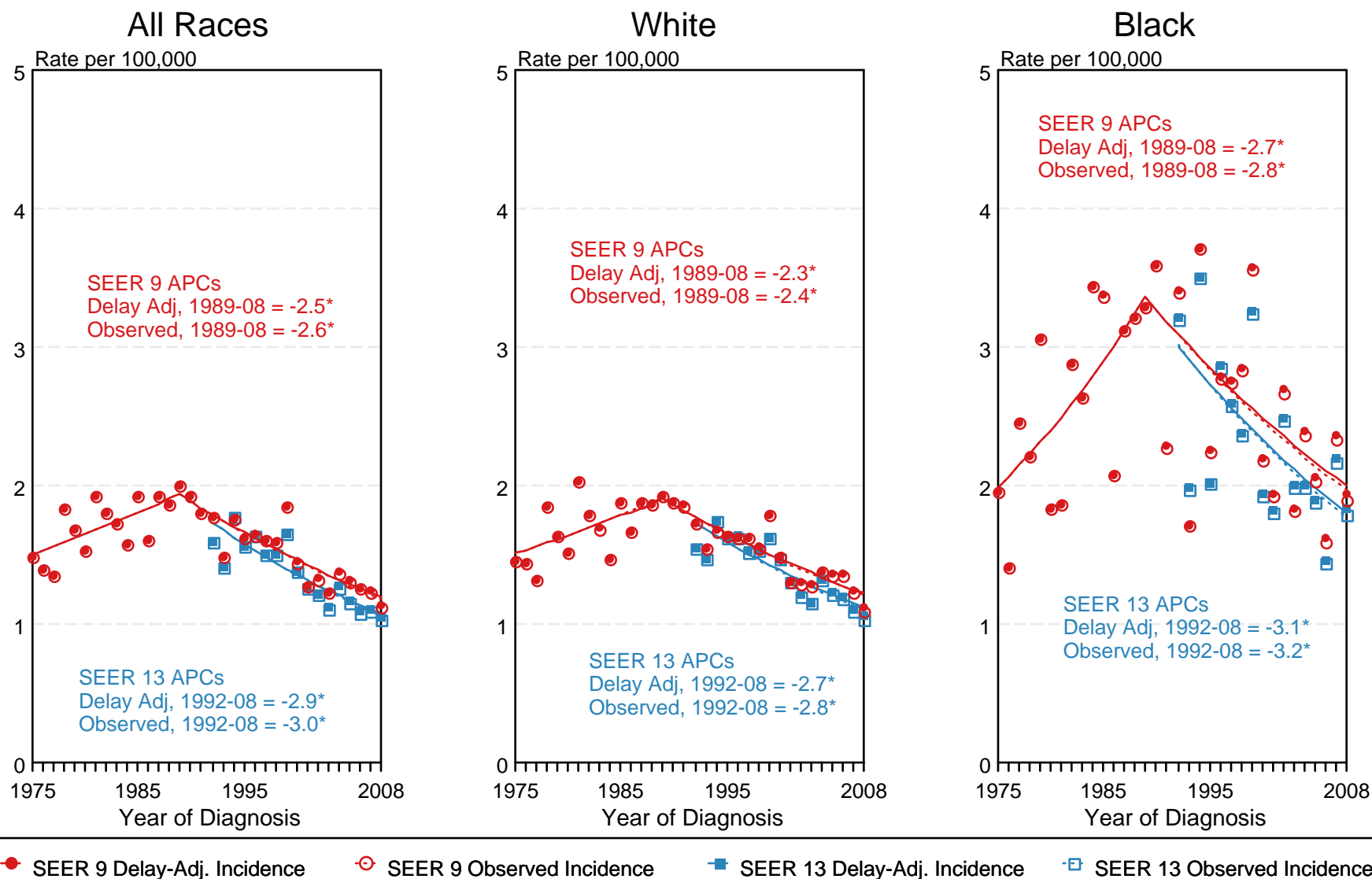
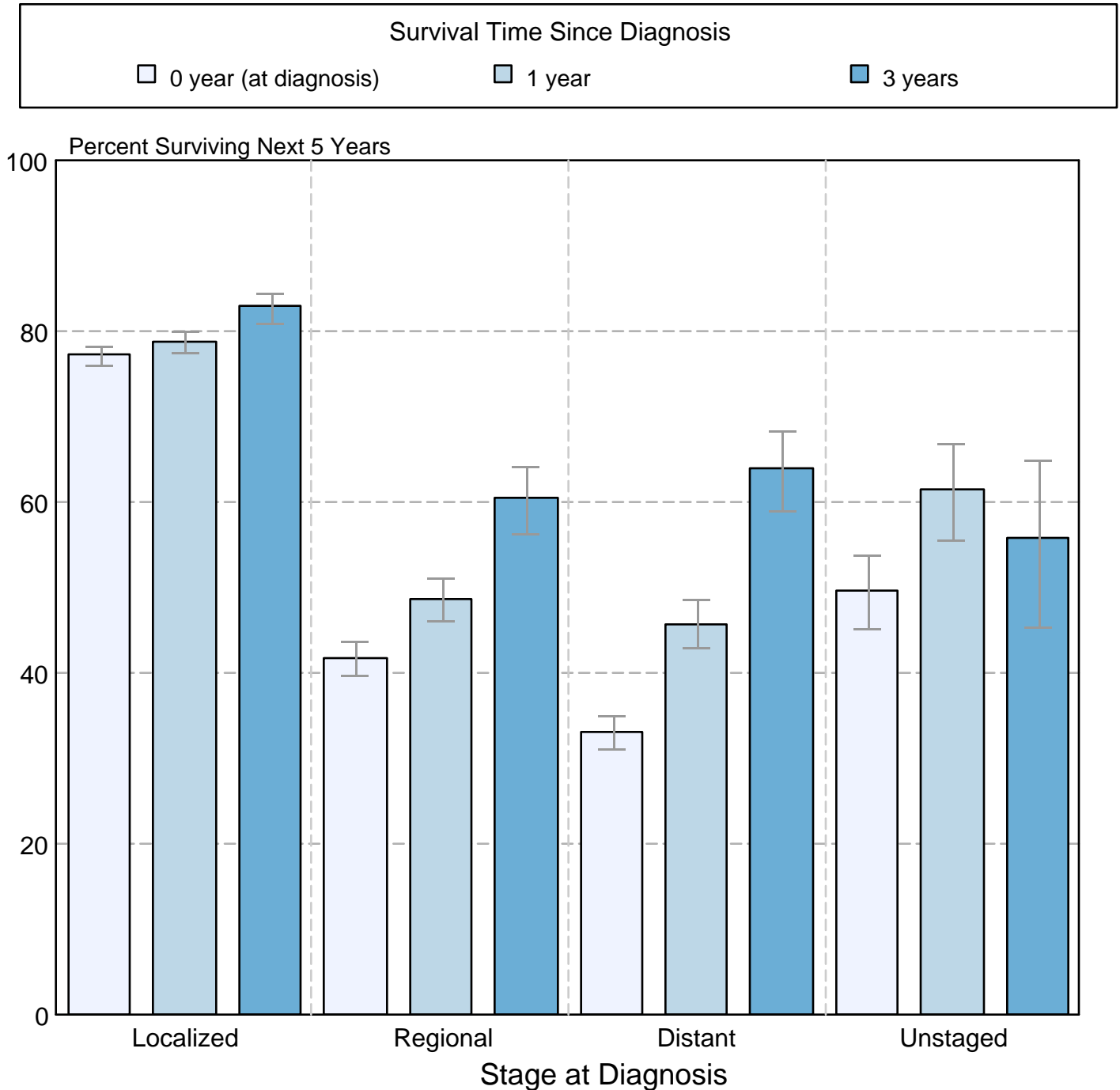


Figure 12.4

^a Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

Figure 12.5

Cancer of the Larynx
5-Year SEER Conditional Relative Survival and
95% Confidence Intervals
 Probability of surviving the next 5 years given the cohort
 has already survived 0, 1, or 3 years
 1998-2007 by stage at diagnosis



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2007. The remaining 13 SEER Areas contribute cases for the entire period 1998-2007.

Percent surviving is not shown if based on less than 25 cases.

Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.